# **Comparisons of Job Characteristics**

Focus Occupation: Life, Physical, and Social Science Technicians, All Other (19-4099)

Associated Occupation: Soil and Plant Scientists (19-1013)

Compare Knowledge
Compare Skills
Compare Abilities
Compare Detailed Work Activities
Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

### Knowledge

Similarity of Focus Occupation to Associated Occupation: 63

Focus Occupation: Life, Physical, and Social Science Technicians, All Other (19-4099)

Associated Occupation: Soil and Plant Scientists (19-1013)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation	
Biology	3.7	18.5	10.6	<<	Extensive education and/or training may be required	
English Language	11.2	16.7	11.7	<<	Extensive education and/or training may be required	
Chemistry	4.8	16.0	9.3	<<	Extensive education and/or training may be required	
Mathematics	9.2	16.0	12.8	<<	Extensive education and/or training may be required	
Food Production	2.1	13.1	10.6	<	Expanded education and/or training may be required	
Geography	3.9	12.6	10.9	<	Expanded education and/or training may be required	
Communications and Media	5.3	11.0	5.9	<<	Extensive education and/or training may be required	
Physics	4.3	10.0	5.9	<<	Extensive education and/or training may be required	

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

#### **Skills**

Similarity of Focus Occupation to Associated Occupation: 7

Focus Occupation: Life, Physical, and Social Science Technicians, All Other (19-4099) Associated Occupation: Soil and Plant Scientists (19-1013)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Science	4.5	16.0	9.0	Extensive development of skills in this area may be required

Reading Comprehension	10.7	15.2	12.0	<<	Extensive development of skills in this area may be required
Speaking	10.8	14.8	11.0	<<	Extensive development of skills in this area may be required
Judgment and Decision Making	9.4	13.8	10.1	<<	Extensive development of skills in this area may be required
Complex Problem Solving	9.1	12.8	9.7	<<	Extensive development of skills in this area may be required
Systems Analysis	6.5	11.8	9.2	<	A higher skill level may be required
Systems Evaluation	6.4	11.1	8.3	<<	Extensive development of skills in this area may be required
Mathematics	6.2	10.6	9.0	<	A higher skill level may be required
Operations Analysis	5.0	9.4	7.3	<	A higher skill level may be required
Programming	2.2	5.1	2.8	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## **Abilities**

### Similarity of Focus Occupation to Associated Occupation: 91

Focus Occupation: Life, Physical, and Social Science Technicians, All Other (19-4099) Associated Occupation: Soil and Plant Scientists (19-1013)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Inductive Reasoning	10.2	15.1	11.8	<<	Extensive improvement in abilities may be required
Deductive Reasoning	10.6	14.7	12.0	<	Some improvement in abilities may be required
Speech Clarity	10.2	13.8	9.8	<<	Extensive improvement in abilities may be required
Originality	7.6	13.7	8.1	<<	Extensive improvement in abilities may be required
Category Flexibility	9.0	13.3	10.7	<	Some improvement in abilities may be required
Information Ordering	9.9	12.3	11.1	<	Some improvement in abilities may be required
Fluency of Ideas	7.6	12.2	7.5	<<	Extensive improvement in abilities may be required
Far Vision	7.8	11.2	8.8	<	Some improvement in abilities may be required
Number Facility	6.3	10.7	8.8	<	Some improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of  $O^*NET$  (Occupation Information Network) data.

There are no common work activities.

# **Tools and Technologies that Both Occupations Have in Common**

Similarity of Focus
Occupation to Associated
Occupation: 68

Focus Occupation: Life, Physical, and Social Science Technicians, All Other (19-4099) Associated Occupation: Soil and Plant Scientists (19-1013)

Tools and Technologies	Exclusivity
Audio and visual equipment	4
Business function specific software	1
Cameras	2
Computers	1
Content authoring and editing software	1
Data management and query software	1
Development software	4
Electrochemical measuring instruments and accessories	9
Humidity and moisture measuring instruments	15
Industry specific software	1
Information exchange software	1
Light and wave generating and measuring equipment	4
Radar and sonar systems and components	24
Soil measuring equipment	20
Spectroscopic equipment	10

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.